

9513339.1938

574 MAY 01 1995	ENGINEERING DATA TRANSMITTAL	Page 1 of 1 1. EDT 610421
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BD-7400-172-1

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Auger Samples 95-AUG-014 and 95-AUG-015**Release Date:** May 1, 1995

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

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WHC Information Release Administration Specialist:
Kara M. Broz

May 1, 1995

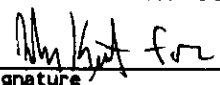

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9513339.1941



Westinghouse
Hanford Company

P.O. Box 1970 Richland, WA 99352

WHC-SD-WM-DP-105, REV. 0

ANALYTICAL SERVICES

**45-DAY SAFETY SCREEN RESULTS FOR TANK 241-B-112,
AUGER SAMPLES, 95-AUG-014 AND 95-AUG-015**

Date Printed:

APRIL 26, 1995

WHC-SD-WM-DP-105, REV. 0

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This Document consists of pages 1 through 34.

9513339.1943

WHC-SD-WM-DP-105, REV. 0

NARRATIVE

WHC-SD-WM-DP-105, Rev. 0

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-B-112,
AUGER SAMPLES 95-AUG-014 AND 95-AUG-015ANALYTICAL SUMMARY

Two auger samples from tank 241-B-112 (B-112) were received in the 222-S Laboratories and underwent safety screening analyses, consisting of differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), and total alpha activity. All results for all analyses (DSC, TGA, and total alpha) were within the safety screening notification limits specified in the Tank Characterization Plan (TCP). No notifications nor secondary analyses were required.

SCOPE

This document serves as the 45-day report deliverable for the tank B-112 auger samples collected on March 16, 1995 (95-AUG-014 and 95-AUG-015). The 222-S Laboratories received, extruded, and analyzed each sample in accordance with the TCP referenced below. Included in this report are the primary safety screening results obtained from the analyses and copies of all DSC and TGA raw data scans as requested per the TCP. Photographs of the auger samples were taken during extrusion and, although not included in this report, are available.

SAMPLE RECEIPT, EXTRUSION, AND SUBSAMPLINGAuger 95-AUG-014

Auger sample 95-AUG-014 was collected from riser 7 of tank B-112 using a 10 inch auger bit. It was received into the 222-S Laboratories on March 17, 1995 at 1145 and extruded on March 27, 1995. A small amount of drainable liquid dripped off the auger (less than 5 mL), but no liquid was recovered for analysis. A gray substance was noticed on flutes 2 and 3 at the top of the auger. These moist solids were subsampled as a possible crust sample (2.02 g recovered in vial# 6499). Wet brown solids were subsampled from flutes 4 through 8 (5.70 g subsampled into vial #6633). A total of 7.72 g of material was recovered from this sample. All analyses required per the TCP were conducted. No archive sample was retained since so little material was collected.

Auger 95-AUG-015

Auger sample 95-AUG-015 was collected from riser 3 of tank B-112 using a 10 inch auger bit. It was received into the 222-S Laboratories on March 17, 1995 at 1145 and extruded on March 28, 1995. There was no drainable liquid, and only 2.70 g of material was recovered. This material (brown solids) was scraped from flutes 3 through 8 of the auger and subsampled into vial #6653. All analyses required per the TCP were conducted. No archive sample was retained since so little material was collected.

SAMPLE IDENTIFICATION INFORMATION

Table 1: Sample Identification

LABCORE Sample ID	Customer Sample ID	Analyses
S96T000356	95-AUG-014, Riser 7, auger sample	Extrusion
S95T000357	95-AUG-014, Riser 7, upper half (crust) subsample	DSC/TGA
S95T000864	95-AUG-014, Riser 7, upper half (crust) subsample fusion/digest	Total alpha
S95T000452	95-AUG-014, Riser 7, remaining solids subsample	DSC/TGA
S95T000481	95-AUG-014, Riser 7, remaining solids fusion/digest	Total alpha
S95T000453	95-AUG-015, Riser 3, auger sample	Extrusion
S95T000454	95-AUG-015, Riser 3, subsample	DSC/TGA
S95T000865	95-AUG-015, Riser 3, fusion/digest	Total alpha

ANALYTICAL RESULTS

Analytical results are presented in Tables 2 and 3, with the applicable notification limits shaded.

DSC (Energetics Content)

DSC analyses were performed under a nitrogen atmosphere using procedure LA-514-113, Rev. B-1. For samples exhibiting exotherms, dry weight basis results were calculated from the wet weight basis results by using the average percent water by TGA for each sample. Both the wet and dry results are given in Tables 2 and 3.

Sample S95T000357 exhibited a small exotherm (in both sample and duplicate). The average value for the exotherm was 13.80 J/g with a relative percent difference (RPD) of 117%, which failed the precision criterion stated in the TCP. The large RPD is due to the presence of an exotherm near the detection limit and lack of homogenization (as explained below for TGA). The average exotherm is less than 3% of the limit of 481 J/g. A third sample was analyzed for S95T000357, resulting in an exotherm of 18.7 J/g. This result does not appear in Table 2, but is provided in the raw data. No other sample exhibited an exotherm.

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TGA (Moisture Content)

Weight percent water was performed under a nitrogen atmosphere using procedure LA-560-112, Rev. A-2. Results for samples S95T000357, S95T000452, and S95T000454 and their duplicates ranged in value from 21% to 47% percent water by weight. These results are all above the safety screening action limit of 17% by weight.

The RPD for sample S95T000357 was 62.4% (results were 40.19 and 21.08). This disparity is most likely due to the fact that the sample was not homogenized. Due to the very small amount of sample available, the material was subsampled directly from the auger into a 20 mL vial without homogenization, which would have resulted in unacceptable sample loss.

A third sample was analyzed for sample S95T000357, yielding a result of 32.75% water by weight. A third sample was also analyzed for S95T000452, yielding a result of 46.96% water by weight. These results do not appear in Table 2, but are provided in the raw data.

Total Alpha Activity

Analyses for total alpha activity were performed on samples S95T000481, S95T000864, and S95T000865. Samples were prepared by fusion using procedure LA-549-141, Rev. C-2, and analyses were performed using procedure LA-508-101, Rev. D-2. A sample duplicate was performed on each sample and a spike was performed on sample S95T000481.

The spike recovery was 71.6%, but no rerun was deemed necessary since the samples were near detection limits and far below the safety screening action limit of 41 uCi/g.

REFERENCE

Schreiber, R. D. 1995, WHC-SD-WM-TP-302, Rev. 0, "Tank 241-B-112 Tank Characterization Plan," dated February 6, 1995.

9513339.1947

WHC-SD-WM-DP-105, REV. 0

SAMPLE DATA SUMMARY

A-0002-1 26-apr-1995 13:01:10

45 Day Safety Screen Results for B-112
B-112

RISER: 7
SEGMENT #: 95-AUG-014

TABLE 2

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000357			% Water by TGA using Mettler	%	99.61	n/a	40.19	21.08	30.63	62.4	n/a	n/a	n/a
S95T000357			DSC Exotherm Dry Calculated	Joules/g Dry	n/a	n/a	31.9	8.3	20.10	117	n/a	n/a	n/a
S95T000357			DSC Exotherm using Mettler	Joules/g	110.4	n/a	21.9	5.7	13.80	117	n/a	n/a	n/a
S95T000864	F		Alpha of Digested Solid	uCi/g	98.65	<6.54e-04	<1.07e-3	<5.04e-4	n/a	n/a	n/a	1.00e-03	226.3

SEGMENT PORTION: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000452			% Water by TGA using Mettler	%	99.61	n/a	40.04	43.26	41.65	7.73	n/a	n/a	n/a
S95T000452			DSC Exotherm Dry Calculated	Joules/g Dry	n/a	n/a	0	0	0.000	n/a	n/a	n/a	n/a
S95T000452			DSC Exotherm using Mettler	Joules/g	110.4	n/a	0	0	0.000	n/a	n/a	n/a	n/a
S95T000481	F		Alpha of Digested Solid	uCi/g	98.65	<3.16e-03	1.09e-2	1.04e-2	1.06e-02	4.69	71.60	7.00e-03	56.9

WHC-SD-WM-DP-105, REV. 0

95 3339.948

26-apr-1995 13:01:02
A:0002-1

45 Day Safety Screen Results for B-112
B-112

RISER: 3
SEGMENT #: 95-AUG-015

TABLE 3

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000454			% Water by TGA using Mettler	%	99.61	n/a	45.57	47.14	46.36	3.39	n/a	n/a	n/a
S95T000454			DSC Exotherm Dry Calculated	Joules/g Dry	n/a	n/a	0	0	0.000	n/a	n/a	n/a	n/a
S95T000454			DSC Exotherm using Mettler	Joules/g	99.12	n/a	0	0	0.000	n/a	n/a	n/a	n/a
S95T000865	F		Alpha of Digested Solid	uCi/g	98.65	<6.54e-04	2.43e-3	2.53e-3	2.48e-03	4.03	n/a	2.00e-03	50.3

WHC-SD-WM-DP-105, REV.0

9513339.1949

9513359.1950

WHC-SD-WM-DP-105, REV. 0

UNDIGESTED SAMPLE ANALYSES - DIRECT

9513339.1951

worklistrpt Version 2.0 02/21/95
04/03/95 12:55

WHC-SD-WM-DP-105, REV. 0

1
Page: 1

LABCORE Data Entry Template for Worklist# 922

Analyst: SME Instrument: DSC01 Book # 12N14-17Method: LA-514-113 Rev/Mod B-1

Worklist Comment: Please run B-112 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	<u>28.45</u>	<u>28.2</u>	<u>N/A</u>	Joules/g
95000036	B-112	2 SAMPLE	S95T000454	0	DSC-01	SOLID	<u>N/A</u>	<u>Ø</u>		Joules/g
95000036	B-112	3 DUP	S95T000454	0	DSC-01	SOLID	<u>Ø</u>	<u>Ø</u>	<u>N/A</u>	Joules/g

Final page for worklist # 922

Susie M. Dalton
Analyst Signature Date

REIGHT 4/21/95
Analyst Signature Date

Verified by Blandina Valenzuela 4/24/95

Data Entry Comments: Sample S95T000454 produced two endotherms one at 121.3°C
with a delta H of 1117.6 J/g and the second at 211.0°C with a delta H of 4.5 J/g

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 10 TO 12.

DSC STD 12N14-A

6.340 mg

Rate: 10.0 °C/min

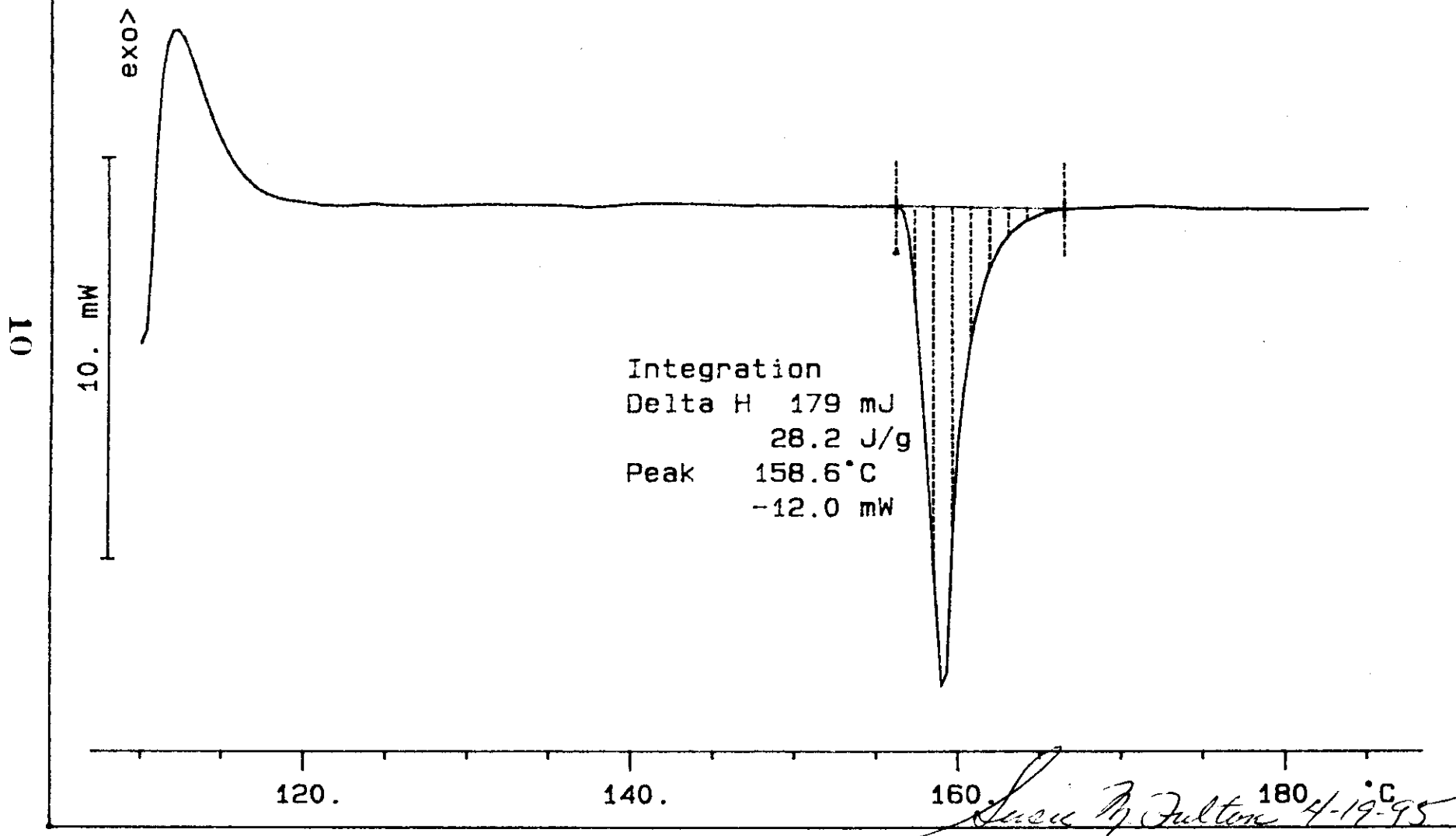
File: 00206.001

Ident: 0.0

DSC METTLER

19-Apr-95

222-S Laboratory



9513339-1952
WHC-SD-WM-DP-105, REV. 0

S95T000454 N2

20.059 mg

Rate: 10.0 °C/min

File: 00210.001

DSC METTLER

20-Apr-95

Ident: 0.0

222-S Laboratory

exo

Integration

Delta H 90 mJ

4.5 J/g

Peak 211.0°C

-1.3 mW

Integration

Delta H 22417 mJ

1117.6 J/g

Peak 121.3°C

-80.5 mW

50. mW

100.

200.

300.

400.

°C

9513339.1953
WHC-SD-WM-DP-105, REV.0

S95T000454 (DUP) N2

22.985 mg

Rate: 10.0 °C/min

File: 00212.001

DSC METTLER

20-Apr-95

Ident: 0.0

222-S Laboratory

exo >

50. mW

Integration

Delta H 171 mJ

7.4 J/g

Peak 210.9°C

-1.9 mW

Integration

Delta H 25092 mJ

1091.7 J/g

Peak 117.3°C

-79.6 mW

100.

200.

300.

400.

°C

9516339.1954
WMC-SD-WM-DP-105, REV.0

9513339.1955

worklistrpt Version 2.0 02/21/95
04/24/95 13:43

WHC-SD-WM-DP-105, REV. 0

Page: 1

LABCORE Data Entry Template for Worklist# 921

Analyst: DWS Instrument: DSC01 Book # 12N14-AMethod: LA-514-113 Rev/Mod B-1

Worklist Comment: Please run B-112 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	<u>28.45</u>	<u>31.0</u>	<u>N/A</u>	Joules/g
95000032	B-112	2 SAMPLE	S95T000357	0	DSC-01	SOLID	<u>N/A</u>	<u>21.9</u>		Joules/g
95000032	B-112	3 DUP	S95T000357	0	DSC-01	SOLID	<u>21.9</u>	<u>5.7</u>	<u>N/A</u>	Joules/g
		4 STD			DSC-01	SOLID	<u>22.45</u>	<u>31.4</u>	<u>N/A</u>	Joules/g
95000032	B-112	5 DUP2	S95T000357	0	DSC-01	SOLID	<u>21.9</u>	<u>18.7</u>	<u>N/A</u>	Joules/g
95000032	B-112	6 SAMPLE	S95T000452	0	DSC-01	SOLID	<u>N/A</u>	<u>Ø</u>		Joules/g
95000032	B-112	7 DUP	S95T000452	0	DSC-01	SOLID	<u>Ø</u>	<u>Ø</u>	<u>N/A</u>	Joules/g

Final page for worklist # 921

See attached for signatures
Analyst Signature _____ Date _____Data entered and verified by
Blandina Valenzuela 4/25/95
Analyst Signature _____ Date _____

Data Entry Comments: S95T000357 produced two endotherms one at 115.3°C with a delta H of 883.0 J/g, and the second at 258.1°C with a delta H of 96.9 J/g. The Std and DUP2 for S95T000357 was performed later, once the chemist was able to look at the results.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code. S95T000452 produced ~~a~~ an endotherm of 947.4 J/g ~~with~~ at 115.3°C

13

BDV
4/25/95

9513339.1956

worklistrpt Version 2.0 02/21/95
04/03/95 12:51

WHC-SD-WM-DP-105, REV. 0

Page: 1

LABCORE Data Entry Template for Worklist# 921Analyst: MS Instrument: DSC01 Book # 12014-AMethod: LA-514-113 Rev/Mod B-1

Worklist Comment: Please run B-112 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	2845	310	N/A	Joules/g
95000032	B-112	2 SAMPLE	S95T000357	0	DSC-01	SOLID	N/A	21.9		Joules/g
95000032	B-112	3 DUP	S95T000357	0	DSC-01	SOLID	21.9		N/A	Joules/g
95000032	B-112	4 SAMPLE	S95T000452	0	DSC-01	SOLID	N/A	Ø		Joules/g
95000032	B-112	5 DUP	S95T000452	0	DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 921


Analyst Signature

4-18-95

Date

Analyst Signature_____
Date

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 15 TO 20.

DSC STD 12N14-A

6.340 mg

Rate: 10.0 °C/min

File: 00195.001

DSC METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

exo >

5. mW

Integration

Delta H 197 mJ

31.0 J/g

Peak 158.5°C

-13.4 mW

David W. Smith

4-18-95

120.

140.

160.

180. °C

9513339.1957

WHC-SD-WM-DP-105, REV.0

S95T000357 N2

28.180 mg

Rate: 10.0 °C/min

File: 00198.001

Ident: 0.0

DSC METTLER

19-Apr-95

222-S Laboratory

exo
↑

50. mW

Integration
Delta H 24883 mJ
883.0 J/g
Peak 115.3°C
-79.9 mW

Integration
Delta H 2730 mJ
96.9 J/g
Peak 258.1°C
-11.2 mW

Integration
Delta H 618 mJ
21.9 J/g
Peak 437.2°C
2.9 mW

100.

200.

300.

400.

°C

9513339.1958

WHC-SD-WM-DE-105, REV.0

S95T000357 (DUP) N2

27.607 mg

Rate: 10.0 °C/min

File: 00200.001

DSC METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

exo >

50. mW

Integration
Delta H 2308 mJ
83.6 J/g
Peak 262.3°C
-12.0 mW

Integration
Delta H 22121 mJ
801.3 J/g
Peak 115.3°C
-83.6 mW

Integration
Delta H 159 mJ
5.7 J/g
Peak 443.2°C
0.8 mW

100.

200.

300.

400.

°C

S95T000357 (DUP2) N2

24.827 mg

Rate: 10.0 °C/min

File: 00034.001

Ident: 0.0

DSC METTLER

24-Apr-95

222-S Laboratory

exo
↑

50. mW

Integration

Delta H 137 mJ
5.5 J/g

Peak 210.9°C
-1.8 mW

Integration

Delta H 27550 mJ
1109.7 J/g

Peak 123.3°C
-81.3 mW

Integration

Delta H 2872 mJ

115.7 J/g
Peak 268.3°C
-11.6 mW

Integration

Delta H 465 mJ
18.7 J/g

Peak 433.3°C
1.7 mW

100.

200.

300.

400.

°C

951339.1960

WHC-SD-WM-DE-105, REV 0

S95T000452 N2

27.285 mg

Rate: 10.0 °C/min

File: 00202.001

DSC METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

exo>

50. mW

Integration

Delta H25850 mJ

947.4 J/g

Peak 115.3°C

-84.1 mW

100.

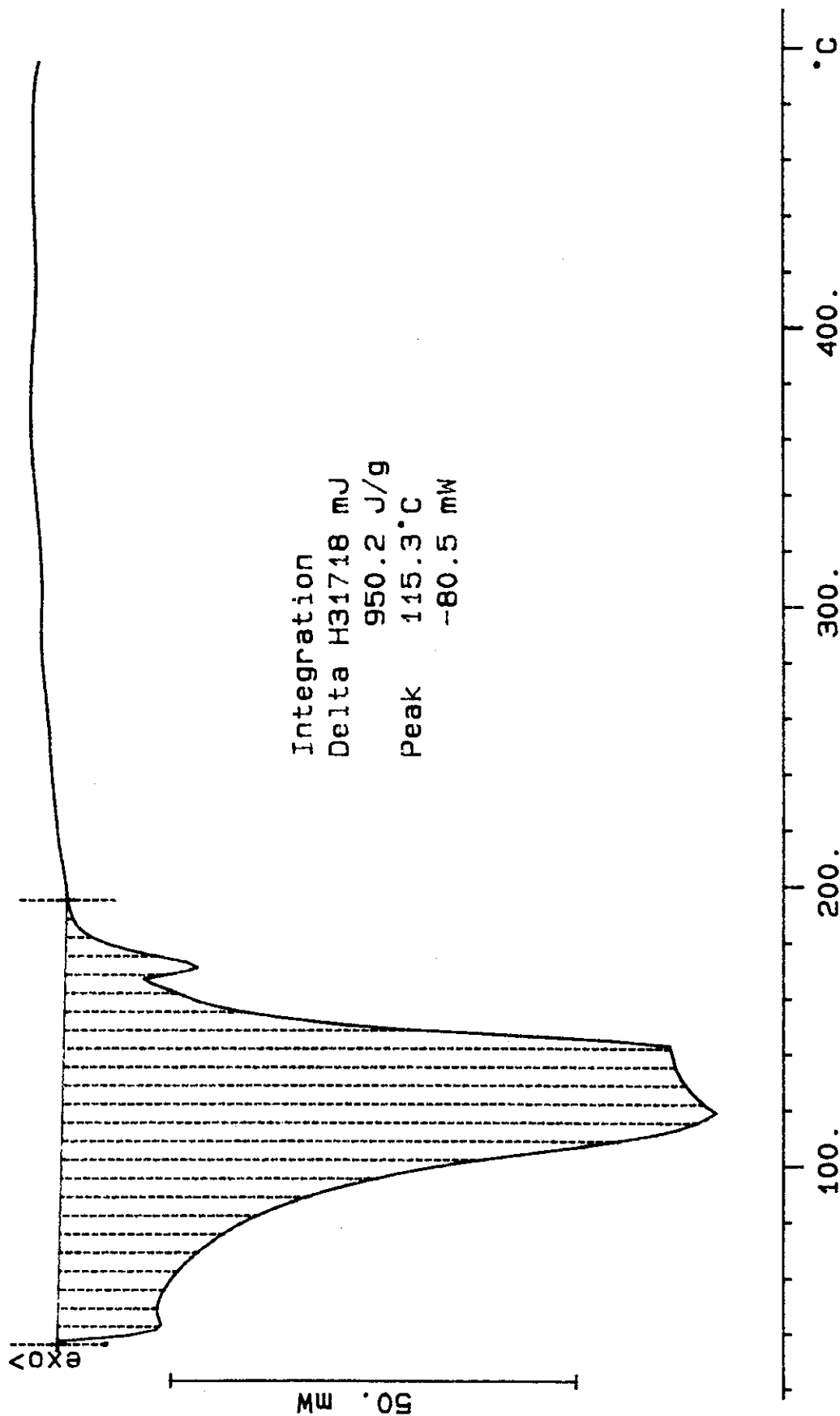
200.

300.

400.

°C

S95T000452 (DUP) N2
33.380 mg
Rate: 10.0 °C/min
File: 00204.001 DSC METTLER 19-Apr-95
Ident: 0.0 222-S Laboratory



9513339.1963

worklistrpt Version 2.0 02/21/95
04/19/95 14:41

WHC-SD-WM-DP-105, REV. 0

Page: 1

LABCORE Data Entry Template for Worklist# 929

Analyst: DWS Instrument: TGA01 Book # 42N8AMethod: LA-560-112 Rev/Mod A-2

Worklist Comment: Please run B-112 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	<u>59.19</u>	<u>57.62</u>	N/A	%
95000032	B-112	2 SAMPLE	S95T000357	0	TGA-01	SOLID	N/A	<u>40.19</u>		%
95000032	B-112	3 DUP	S95T000357	0	TGA-01	SOLID	<u>40.19</u>	<u>21.08</u>	N/A	%
95000032	B-112	4 SAMPLE	S95T000452	0	TGA-01	SOLID	N/A	<u>40.04</u>		%
95000032	B-112	5 DUP	S95T000452	0	TGA-01	SOLID	<u>40.04</u>	<u>43.26</u>	N/A	%
		6 STD			TGA-01	SOLID	<u>59.19</u> 40.19	<u>58.96</u>	N/A	%
95000032	B-112	7 DUP2	S95T000357	0	TGA-01	SOLID	<u>40.19</u>	<u>32.75</u>	N/A	%
95000032	B-112	8 DUP2	S95T000452	0	TGA-01	SOLID	<u>40.04</u>	<u>46.96</u>	N/A	%

Final page for worklist # 929

See attached for signatures
Analyst Signature _____ Date __________
Analyst Signature _____ Date 4-25-95Verified by Blandina Valenzuela 4/25/95

Data Entry Comments:

The DUP2 for samples S95T000357 and S95T000452 were
^{4/24/95}run ^{other 4/24/95 BDD} on the day after the samples. Once the chemist was able to
 look at the results.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
 R = Replicate Number, A = Aliquot Code.

9513339.1964

worklistrpt Version 2.0 02/21/95
04/03/95 13:04

WHC-SD-WM-DP-105, REV. 0

Page: 1

LABCORE Data Entry Template for Worklist# 929

Analyst: aws Instrument: TGA01 Book # 42WB-AMethod: LA-560-112 Rev/Mod A-2

Worklist Comment: Please run B-112 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	<u>59.19</u>	<u>57.62</u>	N/A	%
95000032	B-112	2 SAMPLE	S95T000357	0	TGA-01	SOLID	<u>N/A</u>	<u>40.19</u>		%
95000032	B-112	3 DUP	S95T000357	0	TGA-01	SOLID	<u>40.19</u>	<u>39.70</u>		%
95000032	B-112	4 SAMPLE	S95T000452	0	TGA-01	SOLID	<u>N/A</u>	<u>40.04</u>		%
95000032	B-112	5 DUP	S95T000452	0	TGA-01	SOLID	<u>40.04</u>	<u>43.26</u>	N/A	%

Final page for worklist # 929

Lucie M. Fulton 4-18-95
Analyst Signature Date

Lucie M. Fulton 4-18-95
Analyst Signature Date

Data Entry Comments:

S95T000357 has a second weight loss step of 3.41% at 268°C, duplicate
has 4.49% at 270°C. The sample must be non-homogeneous

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 23 TO 30.

TGA STD 42N8-A

18.076 mg

Rate: 10.0 °C/min

File: 00197.001

TG

METTLER

18-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height-10.42 mg

-57.62 %

ResiC. 7.66 mg

42.38 %

Dpeak 89.2 °C

5. mg

David W. Smith

4-18-95

50. 100. 150. 200. °C

9513339.1965
WHC-SD-WM-DP-105. REV.0

S95T000357 N2

29.176 mg

Rate: 10.0 °C/min

File: 00199.001

TG

METTLER

18-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height-11.72 mg

-40.19 %

ResiC. 17.45 mg

59.81 %

Dpeak 115.0°C

Step Analysis

Height -1.00 mg

-3.41 %

ResiC. 16.44 mg

56.33 %

Dpeak 269.0°C

24

5. mg

100.

200.

300.

400.

°C

S95T000357 (DUP) N2

37.286 mg

Rate: 10.0 °C/min

File: 00201.001

TG

METTLER

18-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height -7.86 mg

-21.08 %

ResiC. 29.43 mg

78.92 %

Dpeak 97.0 °C

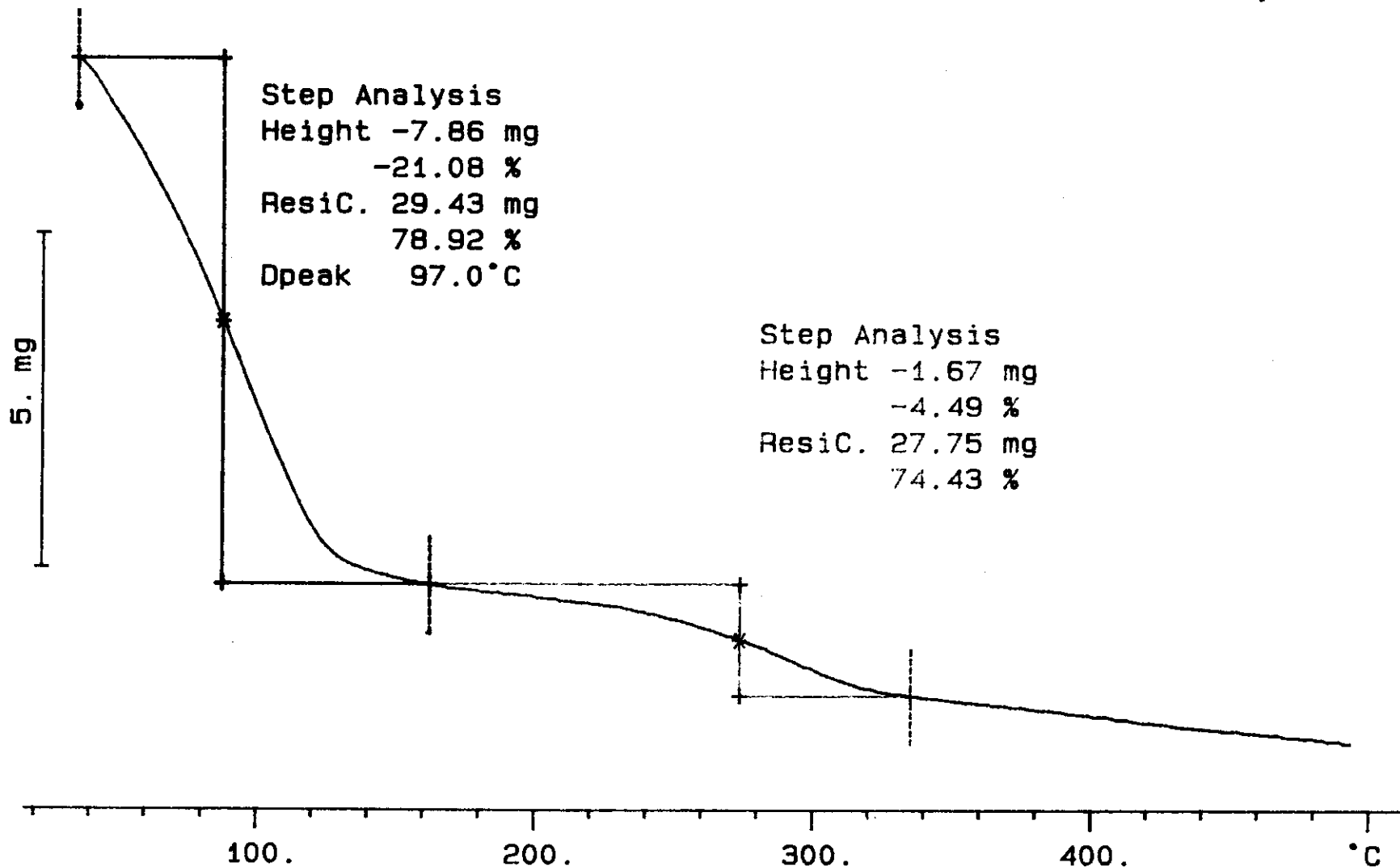
Step Analysis

Height -1.67 mg

-4.49 %

ResiC. 27.75 mg

74.43 %



9513339.1967
WHC-SD-WM-DP-105, REV.0

(DUP2) 4/10/95 BEN

S95T000357 N2

13.018 mg

Rate: 10.0 °C/min

File: 00214.001

TG

METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height -4.26 mg

-32.75 %

ResiC. 8.75 mg

67.25 %

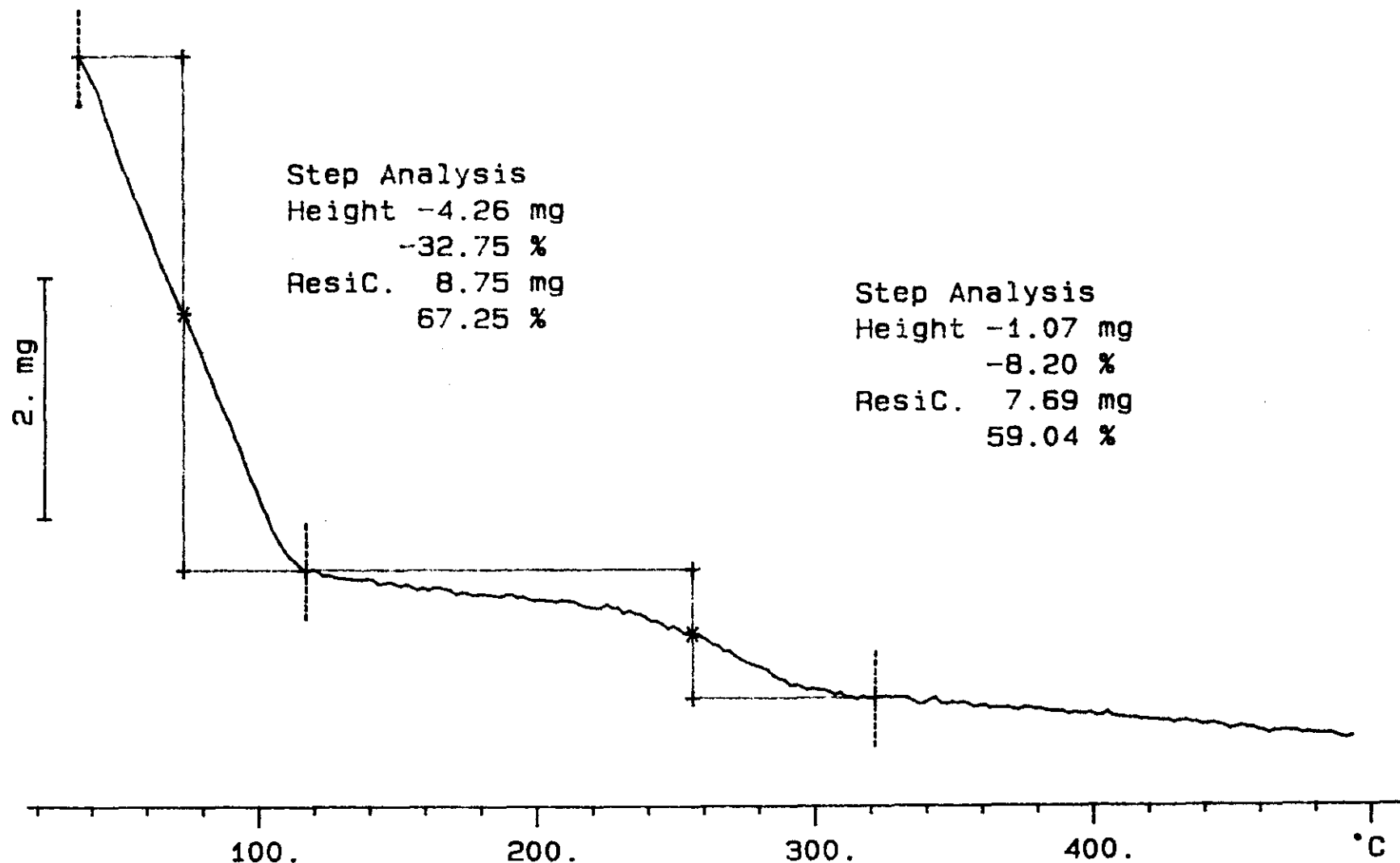
Step Analysis

Height -1.07 mg

-8.20 %

ResiC. 7.69 mg

59.04 %



9513339.1968
WHC-SD-WM-DP-105, REV.0

S95T000452 N2

33.221 mg

Rate: 10.0 °C/min

File: 00203.001

Ident: 0.0

TG

METTLER

18-Apr-95

222-S Laboratory

Step Analysis

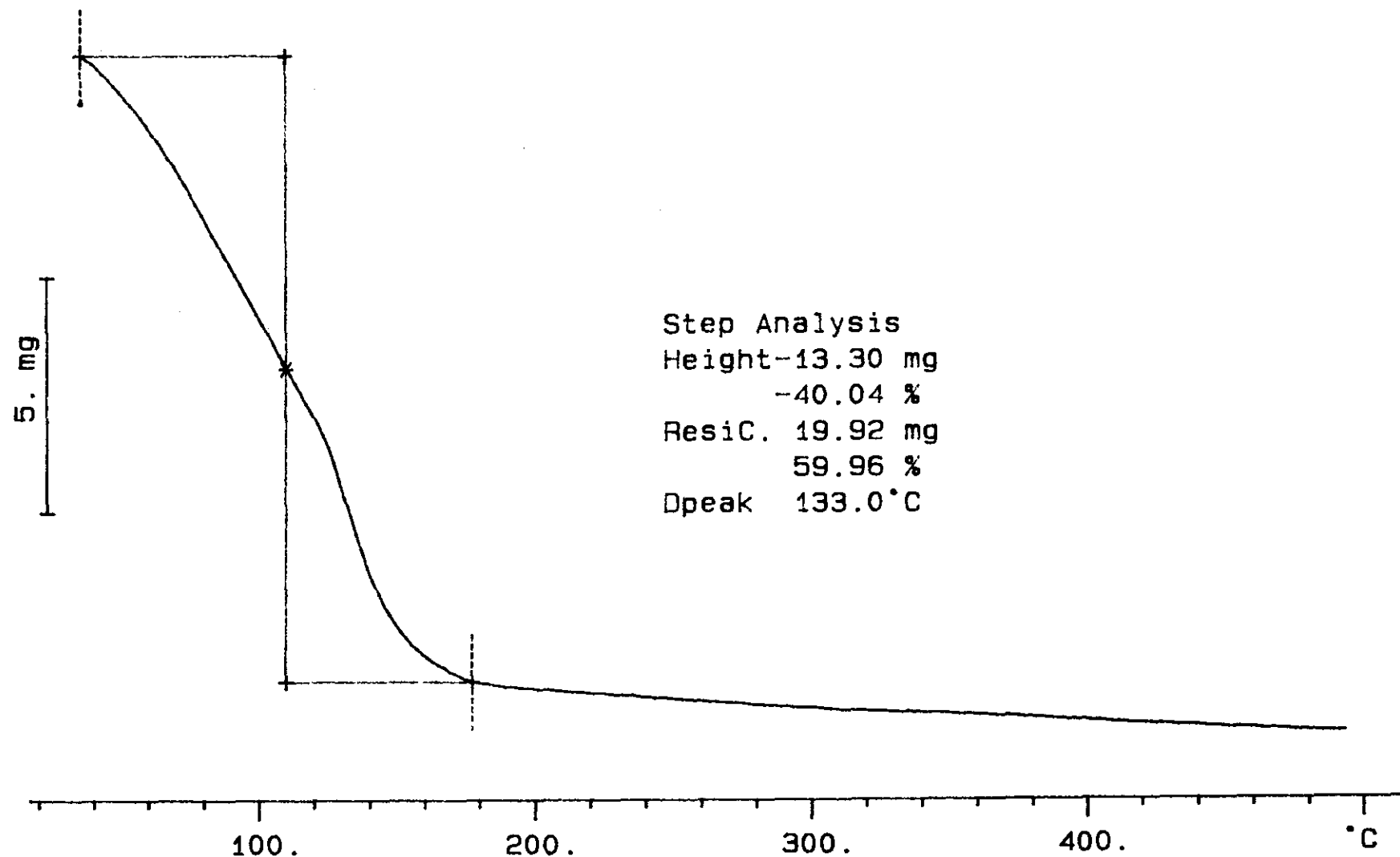
Height-13.30 mg

-40.04 %

ResiC. 19.92 mg

59.96 %

Dpeak 133.0 °C



951339.1969
WHC-SD-WM-DP-105, REV. 0

S95T000452 (DUP) N2

36.008 mg

Rate: 10.0 °C/min

File: 00205.001

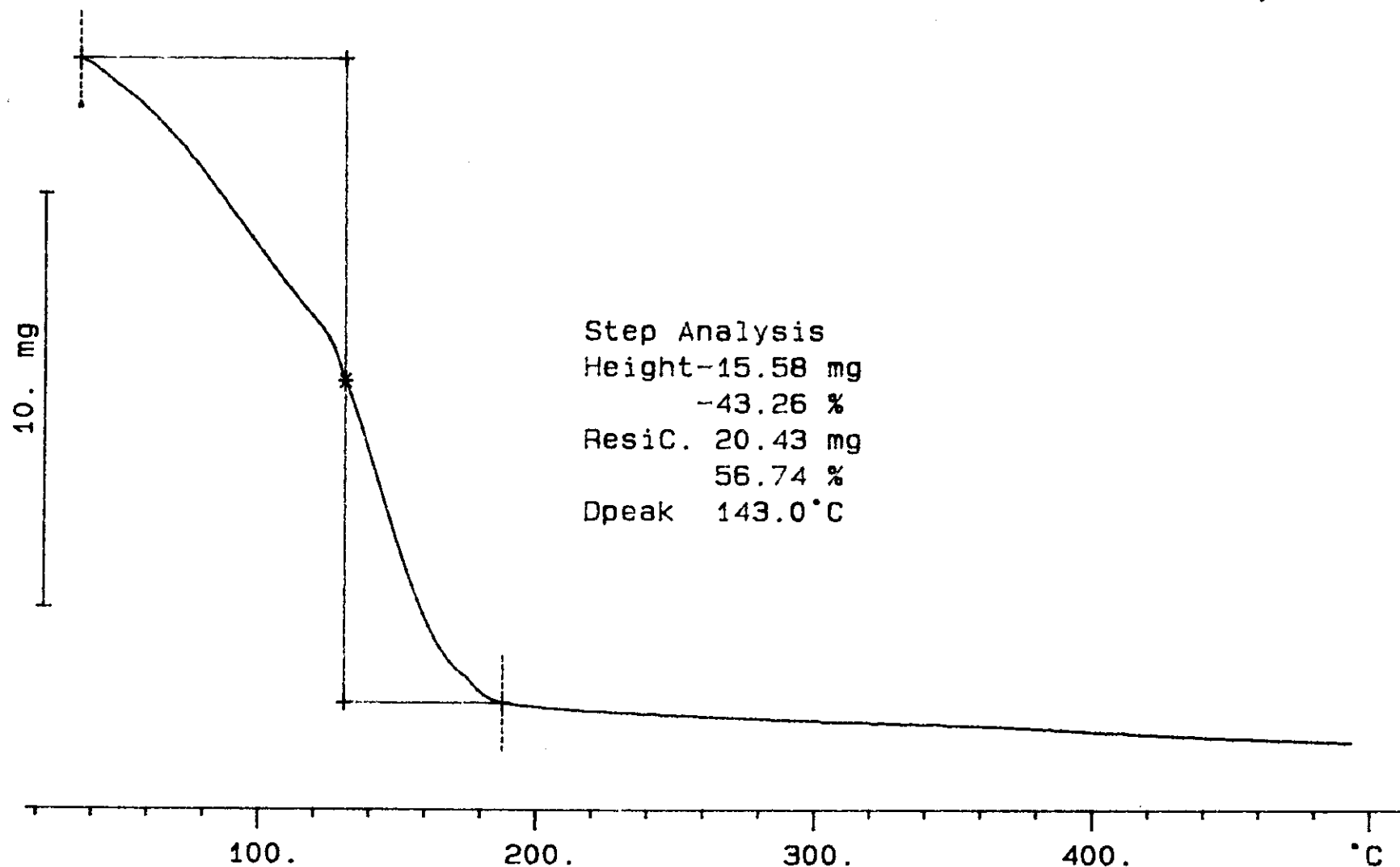
TG

METTLER

18-Apr-95

Ident: 0.0

222-S Laboratory



9513339.1970
WHC-SD-WM-DP-105, REV.0

TGA STD 42N8-A

15.915 mg

Rate: 10.0 °C/min

File: 00207.001

TG

METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

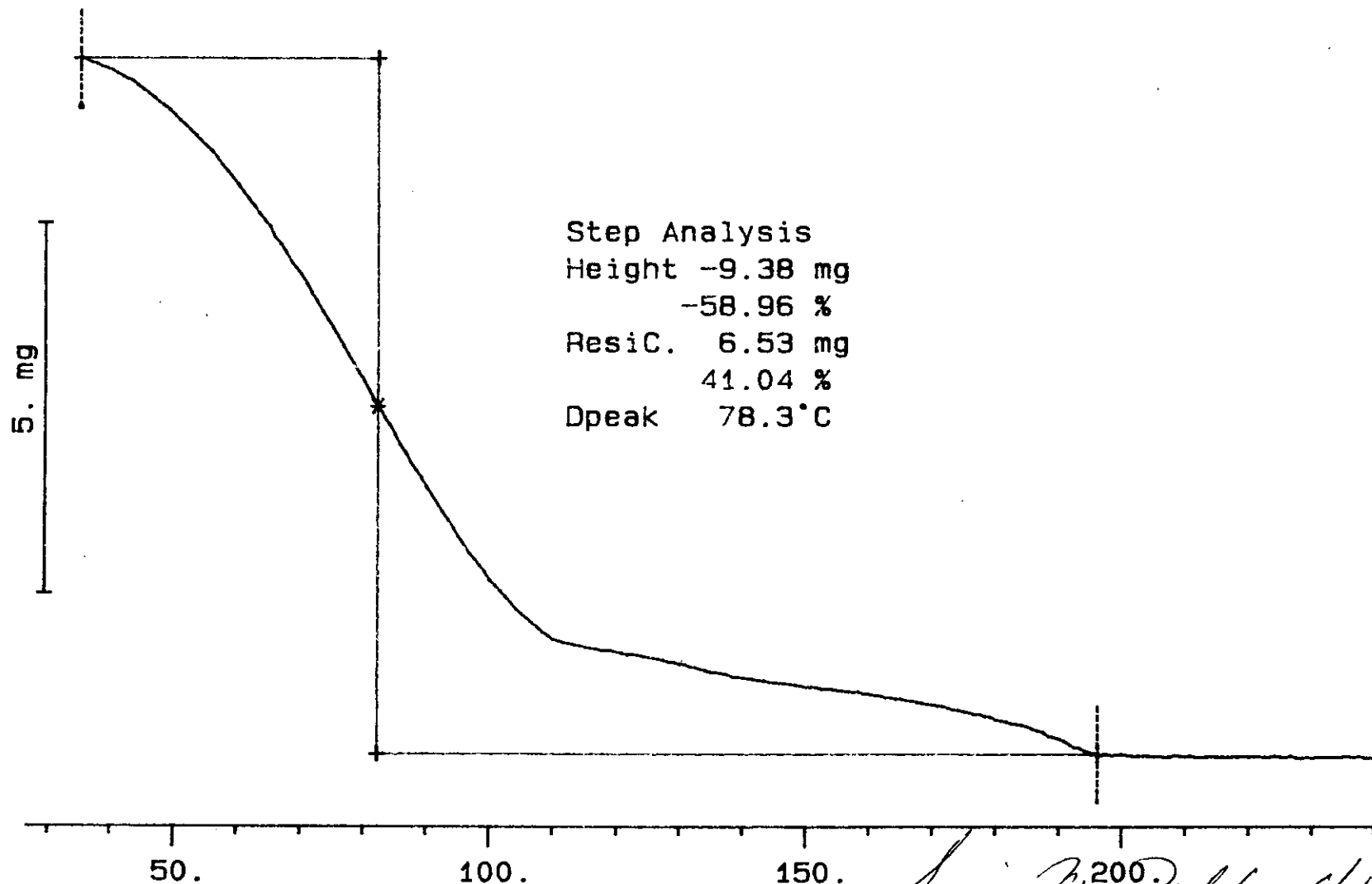
Height -9.38 mg

-58.96 %

ResidC. 6.53 mg

41.04 %

Dpeak 78.3 °C



29

9513339.1971
WHC-SD-WM-DP-105, REV. 0

Lusie M. Fulton 4-19-95

S95T000452 (DUP2) N2

17.737 mg

Rate: 10.0 °C/min

File: 00209.001

TG

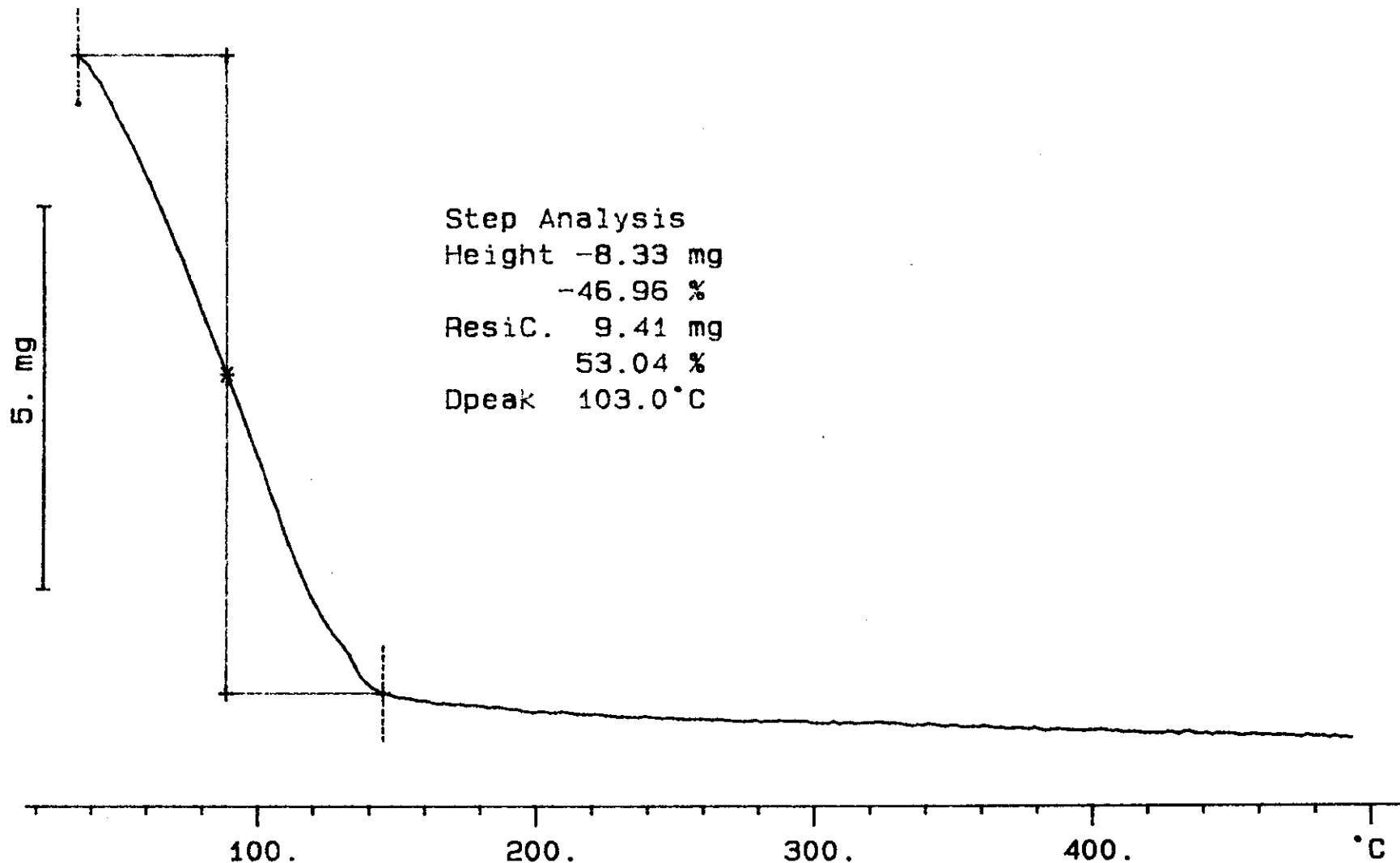
METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis
Height -8.33 mg
-46.96 %
ResidC. 9.41 mg
53.04 %
Dpeak 103.0 °C



9513339.1972
WHC-SD-WM-DP-105, REV. 0

9513339.1973

worklistrpt Version 2.0 02/21/95
04/03/95 13:05

WHC-SD-WM-DP-105, REV. 0

Page: 1

LABCORE Data Entry Template for Worklist# 930Analyst: SMF Instrument: TGA01 Book # 42N8-AMethod: LA-560-112 Rev/Mod A-2

Worklist Comment: Please run B-112 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	<u>59.19</u>	<u>58.96</u>	<u>N/A</u>	%
95000036	B-112	2 SAMPLE	S95T000454	0	TGA-01	SOLID	<u>N/A</u>	<u>45.57</u>		%
95000036	B-112	3 DUP	S95T000454	0	TGA-01	SOLID	<u>45.57</u>	<u>47.14</u>	<u>N/A</u>	%

Final page for worklist # 930

Lusie M. Dutton 4-19-95
 Analyst Signature Date

AE L. L. 4/21/95
 Analyst Signature Date

Verified by Blandina Valenzuela

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
 R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 32 TO 34.

TGA STD 42N8-A

15.915 mg

Rate: 10.0 °C/min

File: 00207.001

Ident: 0.0

TG METTLER 19-Apr-95

222-S Laboratory

Step Analysis

Height -9.38 mg

-58.96 %

ResiC. 6.53 mg

41.04 %

Dpeak 78.3°C

5. mg

50.

100.

150.

200.

°C

Lusie M. Dutton 4-19-95

9513339.1974
WHC-SD-WM-DP-105, REV.0

S95T000454 N2

28.121 mg

Rate: 10.0 °C/min

File: 00211.001

TG

METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

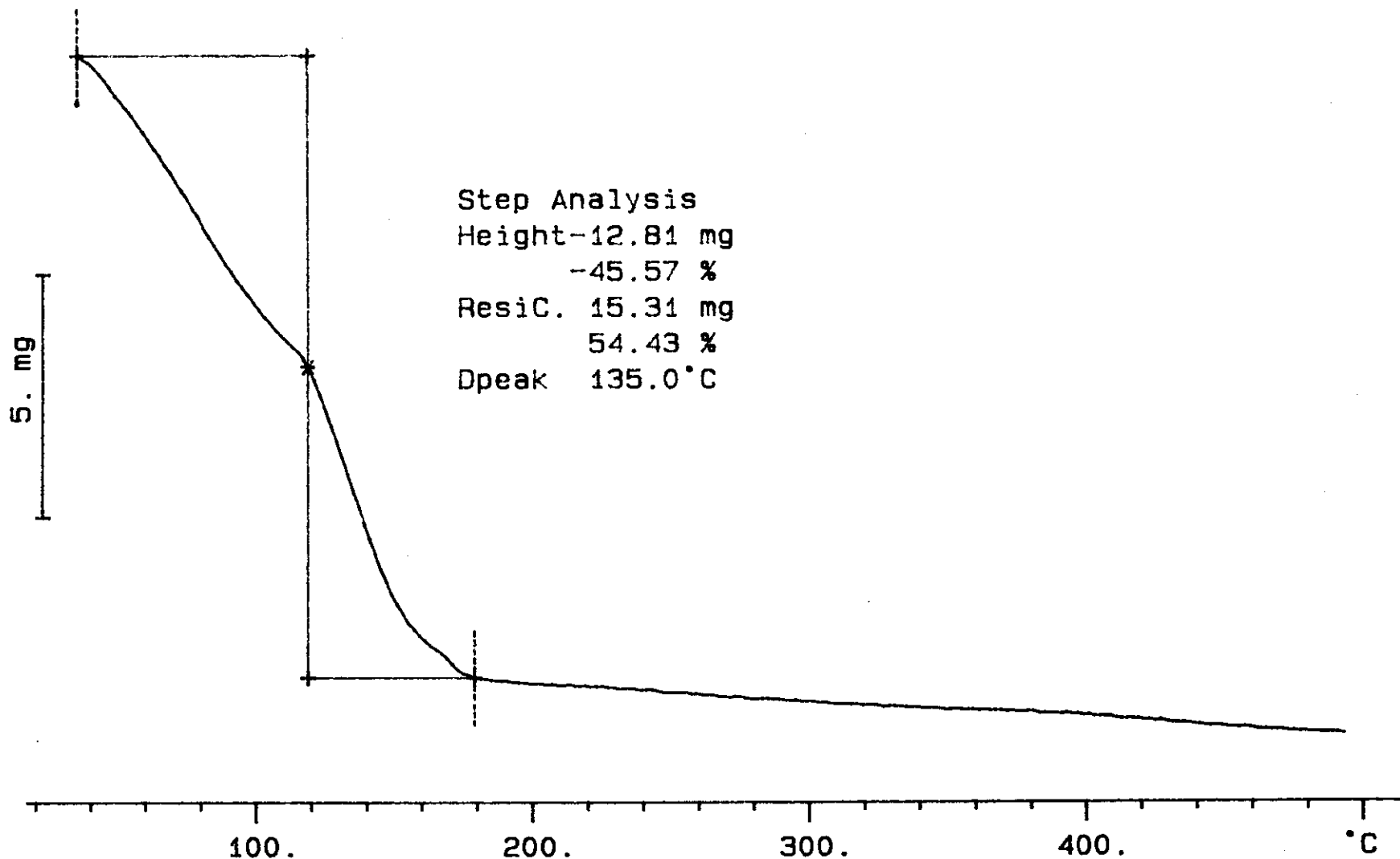
Height-12.81 mg

-45.57 %

ResiC. 15.31 mg

54.43 %

Dpeak 135.0 °C



S95T000454 (DUP) N2

15.688 mg

Rate: 10.0 °C/min

File: 00213.001

TG

METTLER

19-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

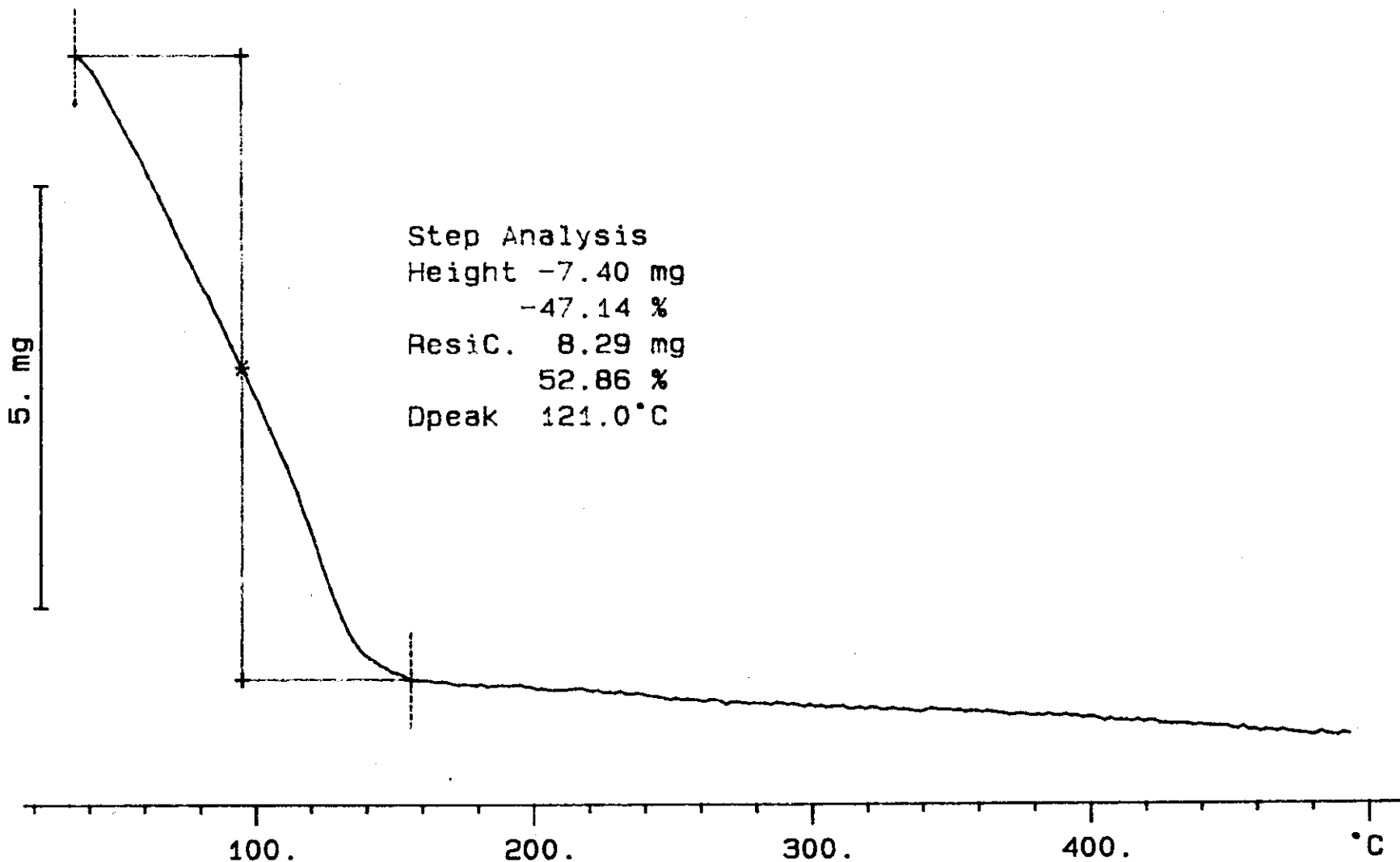
Height -7.40 mg

-47.14 %

ResiC. 8.29 mg

52.86 %

Dpeak 121.0 °C



9513339.1977

DISTRIBUTION SHEET

To Distribution	From Characterization Plans and Reports		Page 1 of 2	
			Date:	04/21/95
Project Title/Work Order WHC-SD-WM-DP-105, Rev. 0, "45-Day Safety Screen Results for Tank 241-B-112, Auger Samples 95-AUG-014 and 95-AUG-015"			EDT NO.:	EDT-610421
			ECN NO.:	N/A
Name	MSIN	Text With all Attach	EDT/ECN ONLY	
<u>Pacific Northwest Laboratory</u>				
J. R. Gormsen	K7-28		X	
S. J. Harris	K7-22	X		
K. L. Silvers	P7-27		X	
<u>U.S. Department of Energy, RL</u>				
C. A. Babel	S7-54	X		
<u>Westinghouse Hanford Company</u>				
J. N. Appel	G3-21		X	
H. Babad	S7-30	X		
R. J. Cash	S7-15	X		
J. M. Conner	H5-27	X		
J. L. Deichman	H4-19		X	
G. D. Forehand	S7-31		X	
C. E. Golberg	H5-49		X	
V. W. Hall	H4-21		X	
D. C. Hetzer	S6-31		X	
L. Jensen	T6-07	X		
G. D. Johnson	G1-19	X		
N. W. Kirch	R2-11	X		
J. G. Kristofzski	T6-06	X		
M. J. Kupfer	H5-49	X		
E. J. Lipke	S7-14		X	
N. G. McDuffie	S7-15	X		
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P. M. Morant	H4-25	X		
P. Sathyanarayana	R2-12	2		
B. C. Simpson	R2-12		X	
D. A. Turner	S7-15	X		
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EDMC	H6-08	X		
LTIC	T6-03		X	
OSTI	L8-07	2		
TFIC (Tank Farm Information Center)	R1-20		X	

9513339.1978

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		ECN NO.:	N/A	
Name	MSIN	Text With all Attach	EDT/ECN ONLY	

Washington State Department of Ecology
 Single-Shell Tank Unit Manager
 S. E. McKinney
 P.O. Box 47600
 Olympia, Washington 98504-7600

X

Environmental Protection Agency
 Single-Shell Tank Unit Manager
 D. R. Einan
 712 Swift Boulevard, Suite 5
 Richland, Washington 99352

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U. S. Department of Energy
 Jim Poppiti
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 Trevion II, EM-36
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Los Alamos Technical Associates
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